



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/649,787	08/28/2003	Rajesh K. Garg	021238-578	5592
21839 7590 11/29/2007 BUCHANAN, INGERSOLL & ROONEY PC POST OFFICE BOX 1404 ALEXANDRIA, VA 22313-1404			EXAMINER FORTUNA, JOSE A	
			ART UNIT 1791	PAPER NUMBER
			NOTIFICATION DATE 11/29/2007	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ADIPFDD@bipc.com
debra.hawkins@bipc.com



UNITED STATES PATENT AND TRADEMARK OFFICE

Commissioner for Patents
United States Patent and Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450
www.uspto.gov

**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 10/649,787
Filing Date: August 28, 2003
Appellant(s): GARG ET AL.

**MAILED
NOV 29 2007
GROUP 1700**

Asaf Batelman
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed on August 16, 2007 appealing from the Office action mailed February 16, 2006.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

US 5,997,691	GAUTAM et al.	12-1999
US 6,214,166	MUNCHOW	04-2001
US 3,596,840	BLOMQVIST	09-1971

US Patent Publication Application 2005/0167534 A1, August 2005.

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Art Unit: 1700

Claims 1-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gautam et al., US Patent No. 5,997,691 as further evidenced by MÜNCHOW, US Patent No. 6,214,166, or BLOMQVIST, US Patent No. 3,596,840 or TOMIKAWA et al., US Patent Publication Application 2005/0167534 A1.

Gautam et al. teach a method of making a web in which a base web is moved along a first path, a slurry of cellulosic material is prepared as and add-on to the base web; and repetitive discharging the add-on-material, see for example, paragraph bridging columns 2 and 3. In the same paragraph, Gautam et al. teach that the add-on material is discharged using a moving belt having an orifice along the endless path, same as claim 2 of the current application. Gautam et al. teach also the use of flax straw as the add-on material, see column 12, lines 43-57 and in the same paragraph, Gautam et al. teach that the add-on material is cooked, bleached and then grinded, i.e., refined. The only difference between the claimed invention and Gautam et al. invention is that the way in which the add-on material is ground, i.e., Gautam et al. teach a wet grinding process, while the present application teaches the dry comminution of the add-on materials. However, using either process of grinding is within the levels of ordinary skill in the art, since both of them are very well known in the art. Note that if one desires to do the dry grinding operation, then the steps of pressing and drying the slurry are a necessary and also very well known in the dry market pulp. Wet and dry grinding are functional equivalent processes and it has been held that “[W]here two equivalents are interchangeable for their desired function, substitution would have been obvious and thus, express suggestion of desirability of the substitution of one for the other is unnecessary.” In re Fout 675 F. 2d 297, 213 USPQ 532 (CCPA 1982); In re Siebentritt, 372 F.2d 566, 152 USPQ 618 (CCPA 1967). With regard to

Art Unit: 1700

claims 4 and 5, the steps of removing shives and contaminants from a pulp is very well known and necessary step(s) after the cooking of the pulp.

The following are evidences of the "functionally equivalence" of the dry and wet process for comminuting additives, fibers:

- US Patent No. 6,214,166 to MÜNCHOW, , column 3, lines 5-41 and more specifically, lines 23-25, where they teach that it is customary to use either the wet or dry method for grinding.
- US Patent Application Publication No. 2005/0167534 A1, to TOMIKAWA et al., paragraph [0006], wherein they teach: "Grinding processes include a dry grinding process and a wet grinding process. When a dry product is to be produced by means of a grinding process, in many cases, a dry grinding process, which does not require a drying step, is employed."
- US Patent No. 3,596,840 to BLOMQVIST, previously cited, teaches in column 1, lines 46-56, some of the advantages of using dry grinding, instead of a wet grinding: "It has now surprisingly been found that cellulose fluff can be advantageously produced starting from pulp in sheet form obtained by conventional methods if the pulp is shredded in dry condition and then, still in dry condition, defibrated in a disk refiner. The use of a disk refiner as disintegrator in the production of fluff according to the present invention has proved to be very advantageous not only economically but also purely technically because disk refiners deliver a

Art Unit: 1700

pulp containing only 10--15 percent of fiber bundles which is much lower than in previously known methods in spite of the fact that a harder pressed pulp is used as starting material. Despite the more effective defibration the risk for fiber cutting is not greater than in previously known methods.

Further it is surprising that it is possible to treat dry pulp in a disk refiner in which otherwise only wet pulp can be treated. Earlier experiments have namely shown that the pulp is stopped in the refiner if the moisture content falls below a certain value and is burnt so that it sticks to the refiner. The processing of dry, shredded pulp according to the present invention involves certain requirements as to the milling disks of the refiner."

As to the advantages of the use of the dry comminution, one of ordinary skill in the art would expect the same disclosed results since the prior art teaches the same results, i.e., less energy to produce the same/similar fiber/particle sizes, see for example US Patent No. 3,596,840.

(10) Response to Argument

Applicant's arguments filed on August 16, 2007 have been fully considered but they are not persuasive.

Applicants argue that the evidentiary references, Blomqvist, Münchow and Tomikawa et al., do not teach the equivalence between the dry and dry comminution process and that they teach away from the dry comminution. Also presented evidence that teaches why a dry process is

Art Unit: 1700

not used in the papermaking, i.e. in fibers to make papers. The arguments are not convincing for the following reasons:

- The evidentiary references, all of them, teach that grinding can be done either dry or wet, and therefore, "wet" and "dry" grinding/refining/comminuting are "functionally" equivalent, since they are used for the same purpose/function, i.e. decrease the size of a material. It was also shown that dry grinding as well as wet grinding has been done in the papermaking for liberating fibers, see Blomqvist. The references were only cited to show an specific teaching, i.e. wet and dry are functionally equivalent, not that Blomqvist shows that other steps after the grinding, i.e. slurring the dried fibers. Note that in recent court decisions, KSR; it has been held that it obvious to try, choosing from a finite number of identified, predictable solutions. Also KSR foreclosures the arguments that a specific teaching, suggestion, or motivation is required to support a finding of obviousness. See recent Board decision *Ex parte Smith*, --USPQ2d--, slip op. at 20, (Bd. Pat. App. & Interf. June 25, 2007) (Citing KSR, 82 USPQ2d at 1396).
- As to applicants arguments that the prior art teaches away from refining cellulosic fibers in the dry state, citing several references, which teach that the bleaching and other operations of the pulp and papermaking operation are affected by the refining of the pulp for making paper. While this may be true, the fibers of the present invention are not been used to make the base paper, but as an additive, i.e. and add-on and therefore, the one of ordinary skill in the art would not need to be concerned with the same variables, i.e.

fibrillation, generation of radicals and plasticizers, the variables discussed by applicants in Paragraph 6. Actually, applicants own arguments answer the question of obviousness in the use of the dry or wet comminution for this particular case, see paragraph 6, where applicants states:

- *Finely ground or fragmented celluloses are well known. These products are produced by mechanical comminution or grinding of dried, refined cellulose. They are employed largely as inert, non-mineral fillers in processed foods and plastics.*

This clearly is the case for the current application; the fibers are used as additives, not as the papermaking fibers. Moreover as indicated above Blomqvist teaches that refining could be done by dry or wet method.

- In conclusion, one of ordinary skill in the art would find obvious to use either “dry” or “wet” refining of the fibers as additives since they are known “functionally” equivalent for the reasons shown above. It has been held that it obvious to try, choosing from a finite number of identified, predictable solutions. Also KSR forecloses the arguments that a specific teaching, suggestion, or motivation is required to support a finding of obviousness. See recent Board decision *Ex parte Smith*, --USPQ2d--, slip op. at 20, (Bd. Pat. App. & Interf. June 25, 2007) (Citing KSR, 82 USPQ2d at 1396).

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner’s answer.

For the above reasons, it is believed that the rejections should be sustained.

For the above reasons, it is believed that the rejections should be sustained.

This examiner's answer contains a new ground of rejection set forth in section (9) above. Accordingly, appellant must within **TWO MONTHS** from the date of this answer exercise one of the following two options to avoid *sua sponte* **dismissal of the appeal** as to the claims subject to the new ground of rejection:

(1) **Reopen prosecution.** Request that prosecution be reopened before the primary examiner by filing a reply under 37 CFR 1.111 with or without amendment, affidavit or other evidence. Any amendment, affidavit or other evidence must be relevant to the new grounds of rejection. A request that complies with 37 CFR 41.39(b)(1) will be entered and considered. Any request that prosecution be reopened will be treated as a request to withdraw the appeal.

(2) **Maintain appeal.** Request that the appeal be maintained by filing a reply brief as set forth in 37 CFR 41.41. Such a reply brief must address each new ground of rejection as set forth in 37 CFR 41.37(c)(1)(vii) and should be in compliance with the other requirements of 37 CFR 41.37(c). If a reply brief filed pursuant to 37 CFR 41.39(b)(2) is accompanied by any amendment, affidavit or other evidence, it shall be treated as a request that prosecution be reopened before the primary examiner under 37 CFR 41.39(b)(1).

Extensions of time under 37 CFR 1.136(a) are not applicable to the TWO MONTH time period set forth above. See 37 CFR 1.136(b) for extensions of time to reply for patent applications and 37 CFR 1.550(c) for extensions of time to reply for ex parte reexamination proceedings.

Respectfully submitted,

Art Unit: 1700

Conferees:

Respectfully submitted,

/José A. Fortuna/
Primary patent Examiner
AU; 1791

Conferees:

/Romulo H. Delmendo/

Romulo Delmendo, Appeal Conferee

Steven Griffin



A Technology Center Director or designee must personally approve the new ground(s) of rejection set forth in section (9) above by signing below:



GREGORY MILLS
QUALITY ASSURANCE SPECIALIST